



FIG.1A

Amino Acid Sequence of the Composite HCV_{HC-J1/COC/CHI}

| | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | | | | 5 | | | | | | 10 | | | | | 16 |
| 1 | Met | Ser | Thr | Ile | Pro | Lys | Pro | Gln | Arg | Lys | Thr | Lys | Arg | Asn | Thr | Asn |
| 17 | Arg | Arg | Pro | Gln | Asp | Val | Lys | Phe | Pro | Gly | Gly | Gly | Gln | Ile | Val | Gly |
| 33 | Gly | Val | Tyr | Leu | Leu | Pro | Arg | Arg | Gly | Pro | Arg | Leu | Gly | Val | Arg | Ala |
| 49 | Thr | Arg | Lys | Thr | Ser | Glu | Arg | Ser | Gln | Pro | Arg | Gly | Arg | Arg | Gln | Pro |
| 65 | Ile | Pro | Lys | Val | Arg | Arg | Pro | Glu | Gly | Arg | Thr | Trp | Ala | Gln | Pro | Gly |
| 81 | Tyr | Pro | Trp | Pro | Leu | Tyr | Gly | Asn | Glu | Gly | Cys | Gly | Trp | Ala | Gly | Trp |
| 97 | Leu | Leu | Ser | Pro | Arg | Gly | Ser | Arg | Pro | Ser | Trp | Gly | Pro | Thr | Asp | Pro |
| 113 | Arg | Arg | Arg | Ser | Arg | Asn | Leu | Gly | Lys | Val | Ile | Asp | Thr | Leu | Thr | Cys |
| 129 | Gly | Phe | Ala | Asp | Leu | Met | Gly | Tyr | Ile | Pro | Leu | Val | Gly | Ala | Pro | Leu |
| 145 | Gly | Gly | Ala | Ala | Arg | Ala | Leu | Ala | His | Gly | Val | Arg | Val | Leu | Glu | Asp |
| 161 | Gly | Val | Asn | Tyr | Ala | Thr | Gly | Asn | Leu | Pro | Gly | Cys | Ser | Phe | Ser | Ile |
| 177 | Phe | Leu | Leu | Ala | Leu | Leu | Ser | Cys | Leu | Thr | Val | Pro | Ala | Ser | Ala | Tyr |
| 193 | Gln | Val | Arg | Asn | Ser | Thr | Gly | Leu | Tyr | His | Val | Thr | Asn | Asp | Cys | Pro |
| 209 | Asn | Ser | Ser | Ile | Val | Tyr | Glu | Ala | His | Asp | Ala | Ile | Leu | His | Thr | Pro |
| 225 | Gly | Cys | Val | Pro | Cys | Val | Arg | Glu | Gly | Asn | Val | Ser | Arg | Cys | Trp | Val |
| 241 | Ala | Met | Thr | Pro | Thr | Val | Ala | Thr | Arg | Asp | Gly | Lys | Leu | Pro | Ala | Thr |
| 257 | Gln | Leu | Arg | Arg | His | Ile | Asp | Leu | Leu | Val | Gly | Ser | Ala | Thr | Leu | Cys |
| 273 | Ser | Ala | Leu | Tyr | Val | Gly | Asp | Leu | Cys | Gly | Ser | Val | Phe | Leu | Ile | Gly |
| 289 | Gln | Leu | Phe | Thr | Phe | Ser | Pro | Arg | Arg | His | Trp | Thr | Thr | Gln | Gly | Cys |
| 305 | Asn | Cys | Ser | Ile | Tyr | Pro | Gly | His | Ile | Thr | Gly | His | Arg | Met | Ala | Trp |
| 321 | Asp | Met | Met | Met | Asn | Trp | Ser | Pro | Thr | Ala | Ala | Leu | Val | Met | Ala | Gln |
| 337 | Leu | Leu | Arg | Ile | Pro | Gln | Ala | Ile | Leu | Asp | Met | Ile | Ala | Gly | Ala | His |
| 353 | Trp | Gly | Val | Leu | Ala | Gly | Ile | Ala | Tyr | Phe | Ser | Met | Val | Gly | Asn | Trp |
| 369 | Ala | Lys | Val | Leu | Val | Val | Leu | Leu | Leu | Phe | Ala | Gly | Val | Asp | Ala | Glu |
| 385 | Thr | Ile | Val | Ser | Gly | Gly | Gln | Ala | Ala | Arg | Ala | Met | Ser | Gly | Leu | Val |
| 401 | Ser | Leu | Phe | Thr | Pro | Gly | Ala | Lys | Gln | Asn | Ile | Gln | Leu | Ile | Asn | Thr |
| 417 | Asn | Gly | Ser | Trp | His | Ile | Asn | Ser | Thr | Ala | Leu | Asn | Cys | Asn | Glu | Ser |
| 433 | Leu | Asn | Thr | Gly | Trp | Leu | Ala | Gly | Leu | Ile | Tyr | Gln | His | Lys | Phe | Asn |
| 449 | Ser | Ser | Gly | Cys | Pro | Glu | Arg | Leu | Ala | Ser | Cys | Arg | Pro | Leu | Thr | Asp |
| 465 | Phe | Asp | Gln | Gly | Trp | Gly | Pro | Ile | Ser | Tyr | Ala | Asn | Gly | Ser | Gly | Pro |
| 481 | Asp | Gln | Arg | Pro | Tyr | Cys | Trp | His | Tyr | Pro | Pro | Lys | Pro | Cys | Gly | Ile |
| 497 | Val | Pro | Ala | Lys | Ser | Val | Cys | Gly | Pro | Val | Tyr | Cys | Phe | Thr | Pro | Ser |
| 513 | Pro | Val | Val | Val | Gly | Thr | Thr | Asp | Arg | Ser | Gly | Ala | Pro | Thr | Tyr | Ser |
| 529 | Trp | Gly | Glu | Asn | Asp | Thr | Asp | Val | Phe | Val | Leu | Asn | Asn | Thr | Arg | Pro |
| 545 | Pro | Leu | Gly | Asn | Trp | Phe | Gly | Cys | Thr | Trp | Met | Asn | Ser | Thr | Gly | Phe |
| 561 | Thr | Lys | Val | Cys | Gly | Ala | Pro | Pro | Cys | Val | Ile | Gly | Gly | Ala | Gly | Asn |
| 577 | Asn | Thr | Leu | His | Cys | Pro | Thr | Asp | Cys | Phe | Arg | Lys | His | Pro | Asp | Ala |
| 593 | Thr | Tyr | Ser | Arg | Cys | Gly | Ser | Gly | Pro | Trp | Ile | Thr | Pro | Arg | Cys | Leu |
| 609 | Val | Asp | Tyr | Pro | Tyr | Arg | Leu | Trp | His | Tyr | Pro | Cys | Thr | Ile | Asn | Tyr |
| 625 | Thr | Ile | Phe | Lys | Ile | Arg | Met | Tyr | Val | Gly | Gly | Val | Glu | His | Arg | Leu |
| 641 | Glu | Ala | Ala | Cys | Asn | Trp | Thr | Arg | Gly | Glu | Arg | Cys | Asp | Leu | Glu | Asp |
| 657 | Arg | Asp | Arg | Ser | Glu | Leu | Ser | Pro | Leu | Leu | Thr | Thr | Thr | Gln | Trp | |
| 673 | Gln | Val | Leu | Pro | Cys | Ser | Phe | Thr | Thr | Leu | Pro | Ala | Leu | Ser | Thr | Gly |
| 689 | Leu | Ile | His | Leu | His | Gln | Asn | Ile | Val | Asp | Val | Gln | Tyr | Leu | Tyr | Gly |
| 705 | Val | Gly | Ser | Ser | Ile | Ala | Ser | Trp | Ala | Ile | Lys | Trp | Glu | Tyr | Val | Val |

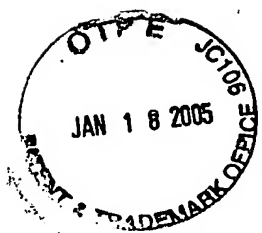


FIG.1B

| | | | | | | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 721 | Leu | Leu | Phe | Leu | Leu | Leu | Ala | Asp | Ala | Arg | Val | Cys | Ser | Cys | Leu | Trp |
| 737 | Met | Met | Leu | Leu | Ile | Ser | Gln | Ala | Glu | Ala | Ala | Leu | Glu | Asn | Leu | Val |
| 753 | Ile | Leu | Asn | Ala | Ala | Ser | Leu | Ala | Gly | Thr | His | Gly | Leu | Val | Ser | Phe |
| 769 | Leu | Val | Phe | Phe | Cys | Phe | Ala | Trp | Tyr | Leu | Lys | Gly | Lys | Trp | Val | Pro |
| 785 | Gly | Ala | Val | Tyr | Thr | Phe | Tyr | Gly | Met | Trp | Pro | Leu | Leu | Leu | Leu | Leu |
| 801 | Leu | Ala | Leu | Pro | Gln | Arg | Ala | Tyr | Ala | Leu | Asp | Thr | Glu | Val | Ala | Ala |
| 817 | Ser | Cys | Gly | Gly | Val | Val | Leu | Val | Gly | Leu | Met | Ala | Leu | Thr | Leu | Ser |
| 833 | Pro | Tyr | Tyr | Lys | Arg | Tyr | Ile | Ser | Trp | Cys | Leu | Trp | Trp | Leu | Gln | Tyr |
| 849 | Phe | Leu | Thr | Arg | Val | Glu | Ala | Gln | Leu | His | Val | Trp | Ile | Pro | Pro | Leu |
| 865 | Asn | Val | Arg | Gly | Gly | Arg | Asp | Ala | Val | Ile | Leu | Leu | Met | Cys | Ala | Val |
| 881 | His | Pro | Thr | Leu | Val | Phe | Asp | Ile | Thr | Lys | Leu | Leu | Leu | Ala | Val | Phe |
| 897 | Gly | Pro | Leu | Trp | Ile | Leu | Asp | Ala | Ser | Leu | Leu | Lys | Val | Pro | Tyr | Phe |
| 913 | Val | Arg | Val | Gln | Gly | Leu | Leu | Arg | Phe | Cys | Ala | Leu | Ala | Arg | Lys | Met |
| 929 | Ile | Gly | Gly | His | Tyr | Val | Gln | Met | Val | Ile | Ile | Lys | Leu | Gly | Ala | Leu |
| 945 | Thr | Gly | Thr | Tyr | Val | Tyr | Asn | His | Leu | Thr | Pro | Leu | Arg | Asp | Trp | Ala |
| 961 | His | Asn | Gly | Leu | Arg | Asp | Leu | Ala | Val | Ala | Val | Glu | Pro | Val | Val | Phe |
| 977 | Ser | Gln | Met | Glu | Thr | Lys | Leu | Ile | Thr | Trp | Gly | Ala | Asp | Thr | Ala | Ala |
| 993 | Cys | Gly | Asp | Ile | Ile | Asn | Gly | Leu | Pro | Val | Ser | Ala | Arg | Arg | Gly | Arg |
| 1009 | Glu | Ile | Leu | Leu | Gly | Pro | Ala | Asp | Gly | Met | Val | Ser | Lys | Gly | Trp | Arg |
| 1025 | Leu | Leu | Ala | Pro | Ile | Thr | Ala | Tyr | Ala | Gln | Gln | Thr | Arg | Gly | Leu | Leu |
| 1041 | Gly | Cys | Ile | Ile | Thr | Ser | Leu | Thr | Gly | Arg | Asp | Lys | Asn | Gln | Val | Glu |
| 1057 | Gly | Glu | Val | Gln | Ile | Val | Ser | Thr | Ala | Ala | Gln | Thr | Phe | Leu | Ala | Thr |
| 1073 | Cys | Ile | Asn | Gly | Val | Cys | Trp | Thr | Val | Tyr | His | Gly | Ala | Gly | Thr | Arg |
| 1089 | Thr | Ile | Ala | Ser | Pro | Lys | Gly | Pro | Val | Ile | Gln | Met | Tyr | Thr | Asn | Val |
| 1105 | Asp | Gln | Asp | Leu | Val | Gly | Trp | Pro | Ala | Pro | Gln | Gly | Ser | Arg | Ser | Leu |
| 1121 | Thr | Pro | Cys | Thr | Cys | Gly | Ser | Ser | Asp | Leu | Tyr | Leu | Val | Thr | Arg | His |
| 1137 | Ala | Asp | Val | Ile | Pro | Val | Arg | Arg | Arg | Gly | Asp | Ser | Arg | Gly | Ser | Leu |
| 1153 | Leu | Ser | Pro | Arg | Pro | Ile | Ser | Tyr | Leu | Lys | Gly | Ser | Ser | Gly | Gly | Pro |
| 1169 | Leu | Leu | Cys | Pro | Ala | Gly | His | Ala | Val | Gly | Ile | Phe | Arg | Ala | Ala | Val |
| 1185 | Cys | Thr | Arg | Gly | Val | Ala | Lys | Ala | Val | Asp | Phe | Ile | Pro | Val | Glu | Asn |
| 1201 | Leu | Glu | Thr | Thr | Met | Arg | Ser | Pro | Val | Phe | Trp | Asp | Asn | Ser | Ser | Pro |
| 1217 | Pro | Val | Val | Pro | Gln | Ser | Phe | Gln | Val | Ala | His | Leu | His | Ala | Pro | Thr |
| 1233 | Gly | Ser | Gly | Lys | Ser | Thr | Lys | Val | Pro | Ala | Ala | Tyr | Ala | Ala | Gln | Gly |
| 1249 | Tyr | Lys | Val | Leu | Val | Leu | Asn | Pro | Ser | Val | Ala | Ala | Thr | Leu | Gly | Phe |
| 1265 | Gly | Ala | Tyr | Met | Ser | Lys | Ala | His | Gly | Ile | Asp | Pro | Asn | Ile | Arg | Thr |
| 1281 | Gly | Val | Arg | Thr | Ile | Thr | Thr | Gly | Ser | Pro | Ile | Thr | Tyr | Ser | Thr | Tyr |
| 1297 | Gly | Lys | Phe | Leu | Ala | Asp | Gly | Gly | Cys | Ser | Gly | Gly | Ala | Tyr | Asp | Ile |
| 1313 | Ile | Ile | Cys | Asp | Glu | Cys | His | Ser | Thr | Asp | Ala | Thr | Ser | Ile | Leu | Gly |
| 1329 | Ile | Gly | Thr | Val | Leu | Asp | Gln | Ala | Glu | Thr | Ala | Gly | Ala | Arg | Leu | Val |
| 1345 | Val | Leu | Ala | Thr | Ala | Thr | Pro | Pro | Gly | Ser | Val | Thr | Val | Pro | His | Pro |
| 1361 | Asn | Ile | Glu | Glu | Val | Ala | Leu | Ser | Thr | Thr | Gly | Glu | Ile | Pro | Phe | Tyr |
| 1377 | Gly | Lys | Ala | Ile | Pro | Leu | Glu | Val | Ile | Lys | Gly | Gly | Arg | His | Leu | Ile |
| 1393 | Phe | Cys | His | Ser | Lys | Lys | Lys | Cys | Asp | Glu | Leu | Ala | Ala | Lys | Leu | Val |
| 1409 | Ala | Leu | Gly | Ile | Asn | Ala | Val | Ala | Tyr | Tyr | Arg | Gly | Leu | Asp | Val | Ser |
| 1425 | Val | Ile | Pro | Thr | Ser | Gly | Asp | Val | Val | Val | Val | Ala | Thr | Asp | Ala | Leu |

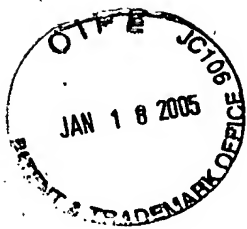


FIG.1C

| | | | | | | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1441 | Met | Thr | Gly | Tyr | Thr | Gly | Asp | Phe | Asp | Ser | Val | Ile | Asp | Cys | Asn | Thr |
| 1457 | Cys | Val | Thr | Gln | Thr | Val | Asp | Phe | Ser | Leu | Asp | Pro | Thr | Phe | Thr | Ile |
| 1473 | Glu | Thr | Ile | Thr | Leu | Pro | Gln | Asp | Ala | Val | Ser | Arg | Thr | Gln | Arg | Arg |
| 1489 | Gly | Arg | Thr | Gly | Arg | Gly | Lys | Pro | Gly | Ile | Tyr | Arg | Phe | Val | Ala | Pro |
| 1505 | Gly | Glu | Arg | Pro | Ser | Gly | Met | Phe | Asp | Ser | Ser | Val | Leu | Cys | Glu | Cys |
| 1521 | Tyr | Asp | Ala | Gly | Cys | Ala | Trp | Tyr | Glu | Leu | Thr | Pro | Ala | Glu | Thr | Thr |
| 1537 | Val | Arg | Leu | Arg | Ala | Tyr | Met | Asn | Thr | Pro | Gly | Leu | Pro | Val | Cys | Gln |
| 1553 | Asp | His | Leu | Glu | Phe | Trp | Glu | Gly | Val | Phe | Thr | Gly | Leu | Thr | His | Ile |
| 1569 | Asp | Ala | His | Phe | Leu | Ser | Gln | Thr | Lys | Gly | Ser | Gly | Glu | Asn | Leu | Pro |
| 1585 | Tyr | Leu | Val | Ala | Tyr | Gln | Ala | Thr | Val | Cys | Ala | Arg | Ala | Gln | Ala | Pro |
| 1601 | Pro | Pro | Ser | Trp | Asp | Gln | Met | Trp | Lys | Cys | Leu | Ile | Arg | Leu | Lys | Pro |
| 1617 | Thr | Leu | His | Gly | Pro | Thr | Pro | Leu | Leu | Tyr | Arg | Leu | Gly | Ala | Val | Gln |
| 1633 | Asn | Glu | Ile | Thr | Leu | Thr | His | Pro | Val | Thr | Lys | Tyr | Ile | Met | Thr | Cys |
| 1649 | Met | Ser | Ala | Asp | Leu | Glu | Val | Val | Thr | Ser | Thr | Trp | Val | Leu | Val | Gly |
| 1665 | Gly | Val | Leu | Ala | Ala | Leu | Ala | Ala | Tyr | Cys | Leu | Ser | Thr | Gly | Cys | Val |
| 1681 | Val | Ile | Val | Gly | Arg | Val | Val | Leu | Ser | Gly | Lys | Pro | Ala | Ile | Ile | Pro |
| 1697 | Asp | Arg | Glu | Val | Leu | Tyr | Arg | Glu | Phe | Asp | Glu | Met | Glu | Glu | Cys | Ser |
| 1713 | Gln | His | Leu | Pro | Tyr | Ile | Glu | Gln | Gly | Met | Met | Leu | Ala | Glu | Gln | Phe |
| 1729 | Lys | Gln | Lys | Ala | Leu | Gly | Leu | Leu | Gln | Thr | Ala | Ser | Arg | Gln | Ala | Glu |
| 1745 | Val | Ile | Ala | Pro | Ala | Val | Gln | Thr | Asn | Trp | Gln | Lys | Leu | Glu | Thr | Phe |
| 1761 | Trp | Ala | Lys | His | Met | Trp | Asn | Phe | Ile | Ser | Gly | Ile | Gln | Tyr | Leu | Ala |
| 1777 | Gly | Leu | Ser | Thr | Leu | Pro | Gly | Asn | Pro | Ala | Ile | Ala | Ser | Leu | Met | Ala |
| 1793 | Phe | Thr | Ala | Ala | Val | Thr | Ser | Pro | Leu | Thr | Thr | Ser | Gln | Thr | Leu | Leu |
| 1809 | Phe | Asn | Ile | Leu | Gly | Gly | Trp | Val | Ala | Ala | Gln | Leu | Ala | Ala | Pro | Gly |
| 1825 | Ala | Ala | Thr | Ala | Phe | Val | Gly | Ala | Gly | Leu | Ala | Gly | Ala | Ala | Ile | Gly |
| 1841 | Ser | Val | Gly | Leu | Gly | Lys | Val | Leu | Ile | Asp | Ile | Leu | Ala | Gly | Tyr | Gly |
| 1857 | Ala | Gly | Val | Ala | Gly | Ala | Leu | Val | Ala | Phe | Lys | Ile | Met | Ser | Gly | Glu |
| 1873 | Val | Pro | Ser | Thr | Glu | Asp | Leu | Val | Asn | Leu | Leu | Pro | Ala | Ile | Leu | Ser |
| 1889 | Pro | Gly | Ala | Leu | Val | Val | Gly | Val | Val | Cys | Ala | Ala | Ile | Leu | Arg | Arg |
| 1905 | His | Val | Gly | Pro | Gly | Glu | Gly | Ala | Val | Gln | Trp | Met | Asn | Arg | Leu | Ile |
| 1921 | Ala | Phe | Ala | Ser | Arg | Gly | Asn | His | Val | Ser | Pro | Thr | His | Tyr | Val | Pro |
| 1937 | Glu | Ser | Asp | Ala | Ala | Ala | Arg | Val | Thr | Ala | Ile | Leu | Ser | Ser | Leu | Thr |
| 1953 | Val | Thr | Gln | Leu | Leu | Arg | Arg | Leu | His | Gln | Trp | Ile | Ser | Ser | Glu | Cys |
| 1969 | Thr | Thr | Pro | Cys | Ser | Gly | Ser | Trp | Leu | Arg | Asp | Ile | Trp | Asp | Trp | Ile |
| 1985 | Cys | Glu | Val | Leu | Ser | Asp | Phe | Lys | Thr | Trp | Leu | Lys | Ala | Lys | Leu | Met |
| 2001 | Pro | Gln | Leu | Pro | Gly | Ile | Pro | Phe | Val | Ser | Cys | Gln | Arg | Gly | Tyr | Lys |
| 2017 | Gly | Val | Trp | Arg | Val | Asp | Gly | Ile | Met | His | Thr | Arg | Cys | His | Cys | Gly |
| 2033 | Ala | Glu | Ile | Thr | Gly | His | Val | Lys | Asn | Gly | Thr | Met | Arg | Ile | Val | Gly |
| 2049 | Pro | Arg | Thr | Cys | Arg | Asn | Met | Trp | Ser | Gly | Thr | Phe | Pro | Ile | Asn | Ala |
| 2065 | Tyr | Thr | Thr | Gly | Pro | Cys | Thr | Arg | Leu | Pro | Ala | Pro | Asn | Tyr | Thr | Phe |
| 2081 | Ala | Leu | Trp | Arg | Val | Ser | Ala | Glu | Glu | Tyr | Val | Glu | Ile | Arg | Gln | Val |
| 2097 | Gly | Asp | Phe | His | Tyr | Val | Thr | Gly | Met | Thr | Thr | Asp | Asn | Leu | Lys | Cys |
| 2113 | Pro | Cys | Gln | Val | Pro | Ser | Pro | Glu | Phe | Phe | Thr | Glu | Leu | Asp | Gly | Val |
| 2129 | Arg | Leu | His | Arg | Phe | Ala | Pro | Pro | Cys | Lys | Pro | Leu | Leu | Arg | Glu | Glu |
| 2145 | Val | Ser | Phe | Arg | Val | Gly | Leu | His | Glu | Tyr | Pro | Val | Gly | Ser | Gln | Leu |

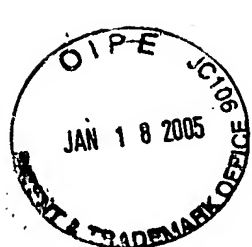


FIG.1D

| | | | | | | | | | | | | | | | | |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2161 | Pro | Cys | Glu | Pro | Glu | Pro | Asp | Val | Ala | Val | Leu | Thr | Ser | Met | Leu | Thr |
| 2177 | Asp | Pro | Ser | His | Ile | Thr | Ala | Glu | Ala | Ala | Gly | Arg | Arg | Leu | Ala | Arg |
| 2193 | Gly | Ser | Pro | Pro | Ser | Val | Ala | Ser | Ser | Ser | Ala | Ser | Gln | Leu | Ser | Ala |
| 2209 | Pro | Ser | Leu | Lys | Ala | Thr | Cys | Thr | Ala | Asn | His | Asp | Ser | Pro | Asp | Ala |
| 2225 | Glu | Leu | Ile | Glu | Ala | Asn | Leu | Leu | Trp | Arg | Gln | Glu | Met | Gly | Gly | Asn |
| 2241 | Ile | Thr | Arg | Val | Glu | Ser | Glu | Asn | Lys | Val | Val | Ile | Leu | Asp | Ser | Phe |
| 2257 | Asp | Pro | Leu | Val | Ala | Glu | Glu | Asp | Glu | Arg | Glu | Ile | Ser | Val | Pro | Ala |
| 2273 | Glu | Ile | Leu | Arg | Lys | Ser | Arg | Arg | Phe | Ala | Gln | Ala | Leu | Pro | Val | Trp |
| 2289 | Ala | Arg | Pro | Asp | Tyr | Asn | Pro | Pro | Leu | Val | Glu | Thr | Trp | Lys | Lys | Pro |
| 2305 | Asp | Tyr | Glu | Pro | Pro | Val | Val | His | Gly | Cys | Pro | Leu | Pro | Pro | Pro | Lys |
| 2321 | Ser | Pro | Pro | Val | Pro | Pro | Pro | Arg | Lys | Lys | Arg | Thr | Val | Val | Leu | Thr |
| 2337 | Glu | Ser | Thr | Leu | Ser | Thr | Ala | Leu | Ala | Glu | Leu | Ala | Thr | Arg | Ser | Phe |
| 2353 | Gly | Ser | Ser | Ser | Thr | Ser | Gly | Ile | Thr | Gly | Asp | Asn | Thr | Thr | Thr | Ser |
| 2369 | Ser | Glu | Pro | Ala | Pro | Ser | Gly | Cys | Pro | Pro | Asp | Ser | Asp | Ala | Glu | Ser |
| 2385 | Tyr | Ser | Ser | Met | Pro | Pro | Leu | Glu | Gly | Glu | Pro | Gly | Asp | Pro | Asp | Leu |
| 2401 | Ser | Asp | Gly | Ser | Trp | Ser | Thr | Val | Ser | Ser | Glu | Ala | Asn | Ala | Glu | Asp |
| 2417 | Val | Val | Cys | Cys | Ser | Met | Ser | Tyr | Ser | Trp | Thr | Gly | Ala | Cys | Val | Thr |
| 2433 | Pro | Cys | Ala | Ala | Glu | Glu | Gln | Lys | Leu | Pro | Ile | Asn | Ala | Leu | Ser | Asn |
| 2449 | Ser | Leu | Leu | Arg | His | His | Asn | Leu | Val | Tyr | Ser | Thr | Thr | Ser | Arg | Ser |
| 2465 | Ala | Cys | Gln | Arg | Gln | Lys | Lys | Val | Thr | Phe | Asp | Arg | Leu | Gln | Val | Leu |
| 2481 | Asp | Ser | His | Tyr | Gln | Asp | Val | Leu | Lys | Glu | Val | Lys | Ala | Ala | Ala | Ser |
| 2497 | Lys | Val | Lys | Ala | Asn | Leu | Leu | Ser | Val | Glu | Glu | Ala | Cys | Ser | Leu | Thr |
| 2513 | Pro | Pro | His | Ser | Ala | Lys | Ser | Lys | Phe | Gly | Tyr | Gly | Ala | Lys | Asp | Val |
| 2529 | Arg | Cys | His | Ala | Arg | Lys | Ala | Val | Thr | His | Ile | Asn | Ser | Val | Trp | Lys |
| 2545 | Asp | Leu | Leu | Glu | Asp | Asn | Val | Thr | Pro | Ile | Asp | Thr | Thr | Ile | Met | Ala |
| 2561 | Lys | Asn | Glu | Val | Phe | Cys | Val | Gln | Pro | Glu | Lys | Gly | Gly | Arg | Lys | Pro |
| 2577 | Ala | Arg | Leu | Ile | Val | Phe | Pro | Asp | Leu | Gly | Val | Arg | Val | Cys | Glu | Lys |
| 2593 | Met | Ala | Leu | Tyr | Asp | Val | Val | Thr | Lys | Leu | Pro | Leu | Ala | Val | Met | Gly |
| 2609 | Ser | Ser | Tyr | Gly | Phe | Gln | Tyr | Ser | Pro | Gly | Gln | Arg | Val | Glu | Phe | Leu |
| 2625 | Val | Gln | Ala | Trp | Lys | Ser | Lys | Lys | Thr | Pro | Met | Gly | Phe | Ser | Tyr | Asp |
| 2641 | Thr | Arg | Cys | Phe | Asp | Ser | Thr | Val | Thr | Glu | Ser | Asp | Ile | Arg | Thr | Glu |
| 2657 | Glu | Ala | Ile | Tyr | Gln | Cys | Cys | Asp | Leu | Asp | Pro | Gln | Ala | Arg | Val | Ala |
| 2673 | Ile | Lys | Ser | Leu | Thr | Glu | Arg | Leu | Tyr | Val | Gly | Gly | Pro | Leu | Thr | Asn |
| 2689 | Ser | Arg | Gly | Glu | Asn | Cys | Gly | Tyr | Arg | Arg | Cys | Arg | Ala | Ser | Gly | Val |
| 2705 | Leu | Thr | Thr | Ser | Cys | Gly | Asn | Thr | Leu | Thr | Cys | Tyr | Ile | Lys | Ala | Arg |
| 2721 | Ala | Ala | Cys | Arg | Ala | Ala | Gly | Leu | Gln | Asp | Cys | Thr | Met | Leu | Val | Cys |
| 2737 | Gly | Asp | Asp | Leu | Val | Val | Ile | Cys | Glu | Ser | Ala | Gly | Val | Gln | Glu | Asp |
| 2753 | Ala | Ala | Ser | Leu | Arg | Ala | Phe | Thr | Glu | Ala | Met | Thr | Arg | Tyr | Ser | Ala |
| 2769 | Pro | Pro | Gly | Asp | Pro | Pro | Gln | Pro | Glu | Tyr | Asp | Leu | Glu | Leu | Ile | Thr |
| 2785 | Ser | Cys | Ser | Ser | Asn | Val | Ser | Val | Ala | His | Asp | Gly | Ala | Gly | Lys | Arg |
| 2801 | Val | Tyr | Tyr | Leu | Thr | Arg | Asp | Pro | Thr | Thr | Pro | Leu | Ala | Arg | Ala | Ala |
| 2817 | Trp | Glu | Thr | Ala | Arg | His | Thr | Pro | Val | Asn | Ser | Trp | Leu | Gly | Asn | Ile |
| 2833 | Ile | Met | Phe | Ala | Pro | Thr | Leu | Trp | Ala | Arg | Met | Ile | Leu | Met | Thr | His |
| 2849 | Phe | Phe | Ser | Val | Leu | Ile | Ala | Arg | Asp | Gln | Leu | Glu | Gln | Ala | Leu | Asp |
| 2865 | Cys | Glu | Ile | Tyr | Gly | Ala | Cys | Tyr | Ser | Ile | Glu | Pro | Leu | Asp | Leu | Pro |
| 2881 | Pro | Ile | Ile | Gln | Arg | Leu | Gly | Cys | Pro | Glu | Arg | Leu | Ala | Ser | | |



Antibody binding to individual peptides and various mixtures in an ELISA assay.

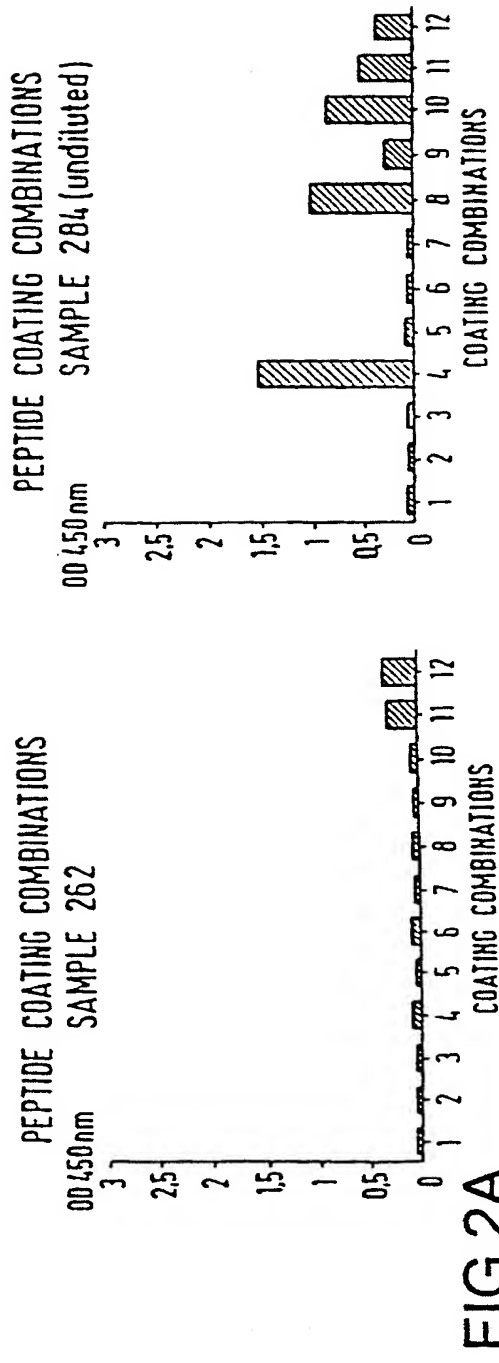
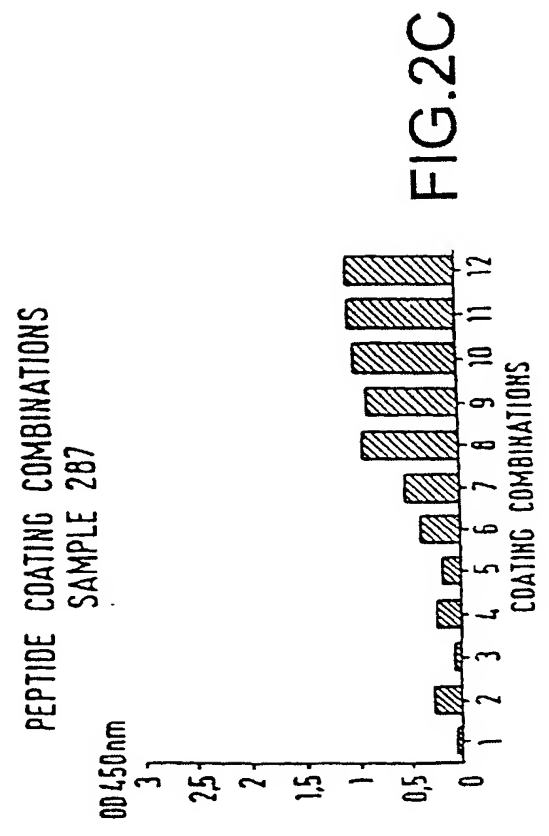


FIG.2B



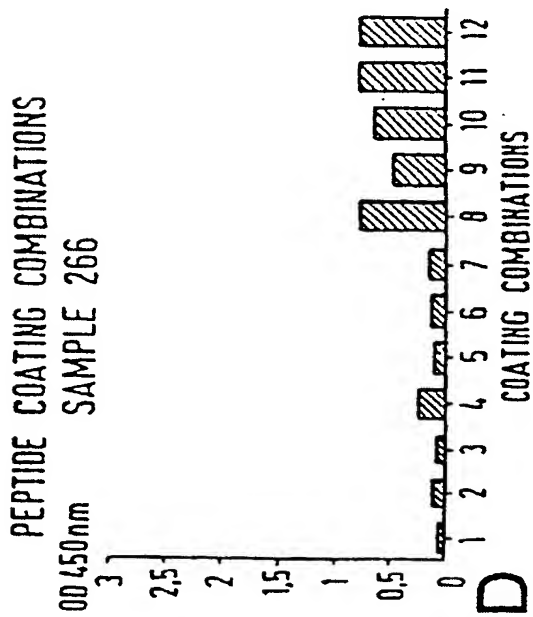
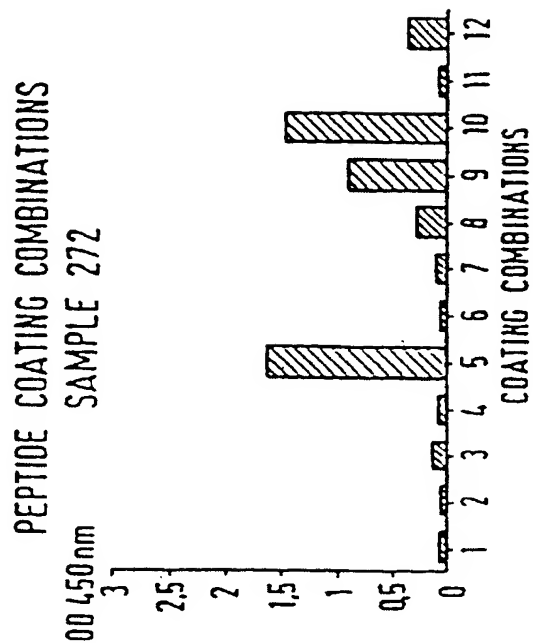


FIG.2D

FIG.2E

PEPTIDE COATING COMBINATIONS
SAMPLE 273

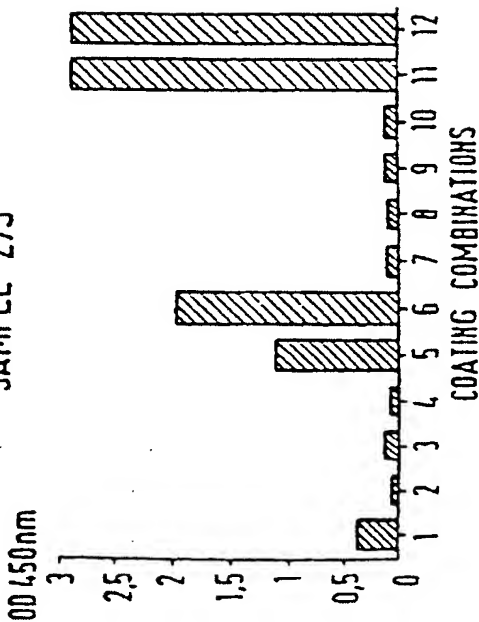


FIG.2F

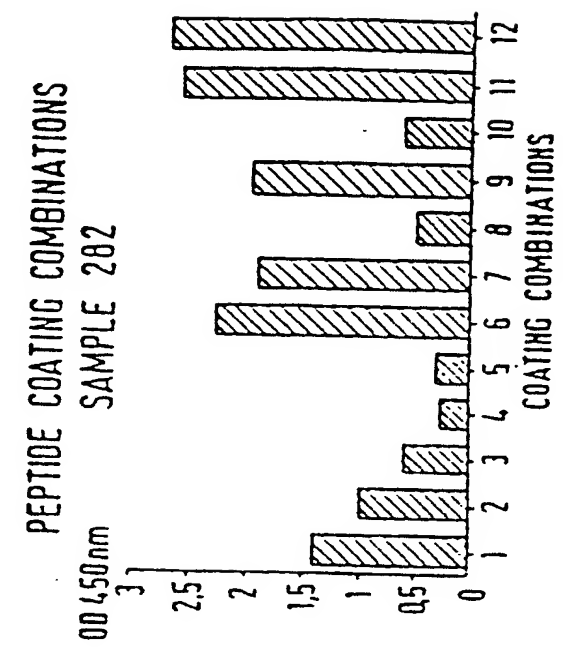
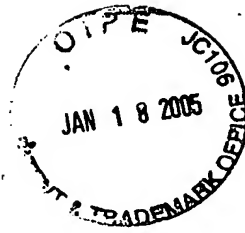


FIG.2H

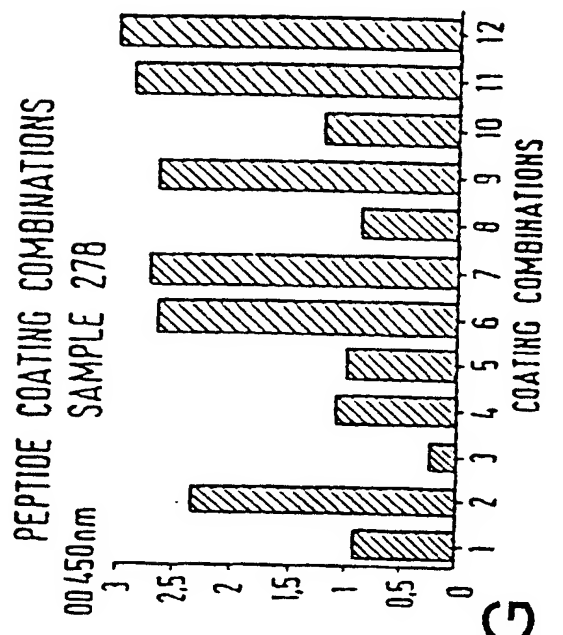


FIG.2G

PEPTIDE COATING COMBINATIONS
SAMPLE 8247

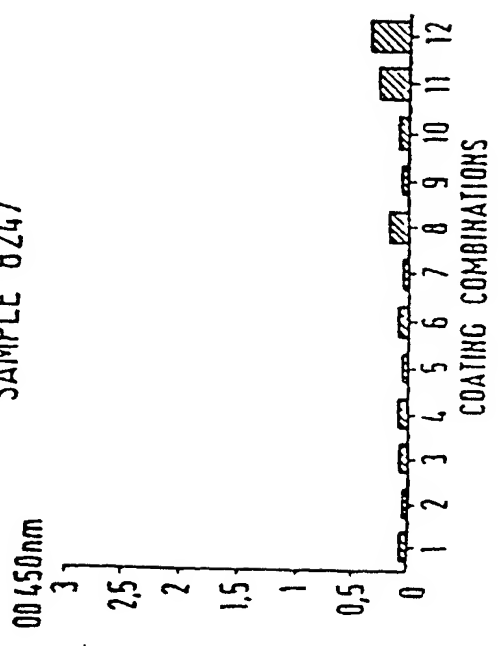


FIG.2I

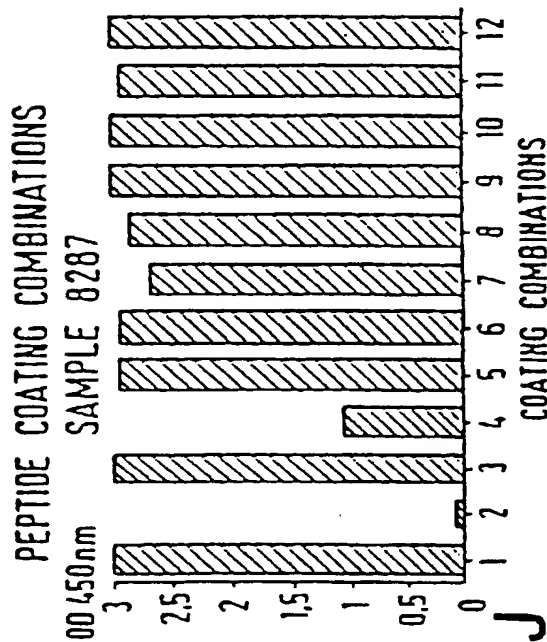
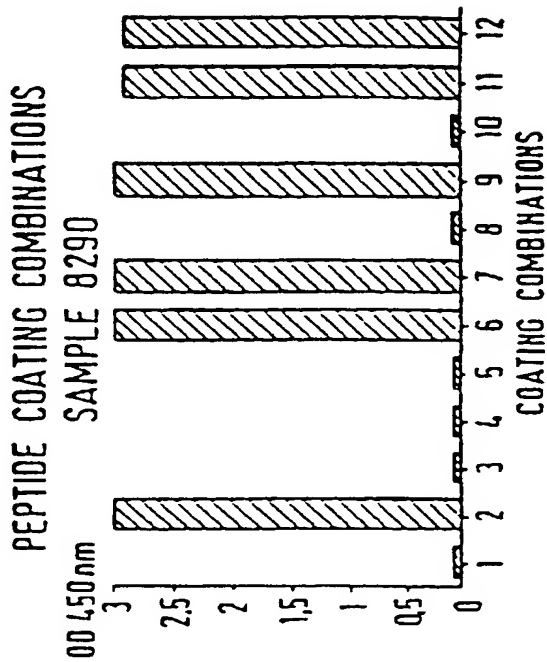


FIG.2J

FIG.2K

PEPTIDE COATING COMBINATIONS
SAMPLE 257

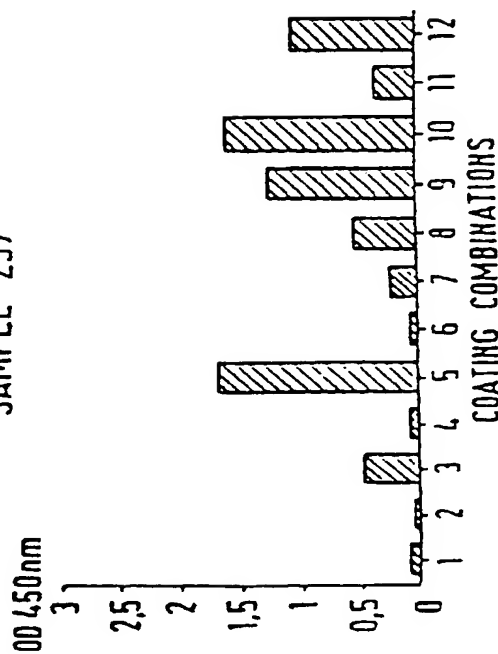


FIG.2L